

# ANNUAL INDEX

Volume 5, September 1967—May 1968

## AUTHOR INDEX

- Allen, Juanita (Science and Teachers) May 68:6
- Alusik, John (Science and Teachers) April 68:5
- Amir, Jonathan (Letters) October 67:4
- Anderson, Ronald D. *Evaluation in Elementary School Science: Part I, Formulating Objectives for Elementary Science*. September 67:20; *Part II, Has the Objective Been Attained?* October 67:33
- Ashley, James P. *Among the Living*. November 67:34
- Balin, Robert P. *The Lever*. September 67:26
- Barrett, Frank (Science and Teachers) March 68:5
- Behm, Walter J. (Science and Teachers) March 68:5
- Bennett, Lloyd M. (Science and Teachers) May 68:6
- Benson, Charles A. (Science and Teachers) January/February 68:9
- Bogut, Thomas L. *Weather Fronts*. March 68:18
- Bohart, Ruth (Science and Teachers) March 68:5
- Bondurant, R. Lynn. *Satellite Orbits*. December 67:19
- Bradley, Helen P. *Science: The World Opens for Head Start Children*. November 67:31
- Branley, Franklyn M. *The Lunar Orbit*. December 67:33
- Brewer, A. C. *Television on a Shoestring*. October 67:11
- Browning, William H. *School Camping*. October 67:14
- Cameron, Winifred Sawtell. *Vulcanism on the Moon*. December 67:26
- Casey, James E., and McCahey, George F. *Magnetism and Electricity*. October 67:16
- Cavanaugh, John R. *Air Pressure — A Different Approach*. October 67:30
- Chase, Craig. *Do You Use Your "Gall Power?"* September 67:24
- Chase, Craig and Knapp, Clifford. *Engineer a Railroad Track Expedition*. April 68:24
- Church, Mary Ann. *"Hang Ten" . . . Oceanography Field Research*. May 68:21
- Clark, Barbara B. (Letters) December 67:6
- Costa, Arthur L. *An Experiment in Discovery*. Jan./Feb. 68: Cover II
- Cowan, Paul J. (Letters) May 68:2
- Doty, Gene (Letters) May 68:4
- Emmerich, Alan (Science and Teachers) January/February 68:9
- Ferslev, Helen L. (Editorial) October 67:6
- Fite, Robert C. (Letters) May 68:2
- Fitzgerald, Denny (Science and Teachers) September 67:8
- Frazier, Calvin M. *A School Administrator Considers the Adoption of a New Program*. March 68:9
- Friedman, Frederica. *The Boundaries of Elementary School Science*. April 68:31
- Gardner, Robert. *How Much Does Air Weigh?* May 68:14
- Gebhart, Marion S. (Science and Teachers) September 67:8
- Gessel, John K. *The Discovery Approach Applied*. November 67:33
- Gillespie, D. Craig. *Open-Ended Science Activities*. April 68:27
- Goldberg, Lazer. *The Operative Content of Science and Values*. January/February 68:11
- Goldsmith, Uriel (Letters) May 68:3
- Goodwin, Lilla M. *The Wonders of Ponds and Streams*. September 67:16
- Gosier, Lester J. (Science and Teachers) May 68:6
- Gray, Joan E., Gross, Helen E., and Struthers, Joseph A. *From Egg to Egg in Nine Weeks*. November 67:9
- Grimm, Charles (Science and Teachers) November 67:7
- Gross, Helen E., Gray, Joan E., and Struthers, Joseph A. *From Egg to Egg in Nine Weeks*. November 67:9
- Heyden, Francis J. *Mountains, Craters, and Seas on the Moon*. December 67:9
- Hill, Katherine E. *The Recognition and Significance of Children as Innovators*. September 67:29
- Hopman, Anne and Spitzer, Gerald (Letters) May 68:3
- Hume, A. Clare (Letters) May 68:3
- Iddings, Roger G. *Water Hardness*. April 68:7
- Iona, Mario (Letters) October 67:4
- Koutnik, Paul (Letters) May 68:2
- Knapp, Clifford and Chase, Craig. *Engineer a Railroad Track Expedition*. April 68:24
- Kurtz, Edwin B. *Photosynthesis and Respiration* (Science Seminar) October 67:39
- Lamberton, Berenice G. *Americans on the Moon*. December 67:10
- Langford, Eileen. *Shells in September*. September 67:11
- Lansdown, Brenda and Pershouse, Lisa. *Insect Interest Transforms a Neighborhood*. April 68:12
- Lowery, Lawrence F. and Peterson, Rita W. *Soil Gardening* May 68:7
- Lundstrom, Donald F. and Swanson, A. Donald. *Bees in the Classroom*. April 68:15
- Maben, Jerrold William and Pennell, Rochelle Hartz. *Lunar Games*. December 67:30
- Marcuccio, Phyllis R. (Editorial) November 67:4
- Mayberry, Anna. *Studying Root Structure Through Hydroponics*. September 67:27
- McCahey, George F. and Casey, James E. *Magnetism and Electricity*. October 67:16
- Nelson, Pearl Astrid and Patton, Roberta. *Can You Follow Directions?* April 68:26
- Neuberger, Harold T. *A Closed System for Natural Selection*. May 68:18
- Newport, John F. (Science and Teachers) January/February 68:9
- Nicodemus, Robert B. (Letters) December 67:5
- Olson, Lynn (Science and Teachers) January/February 68:9
- Patton, Roberta and Nelson, Pearl Astrid. *Can You Follow Directions?* April 68:26
- Pennell, Rochelle Hartz and Maben, Jerrold William. *Lunar Games*. December 67:30
- Pershouse, Lisa and Lansdown, Brenda. *Insect Interest Transforms a Neighborhood*. April 68:12
- Persky, Barry Stephen. *Are Ladybugs Helpful Insects?* November 67:23; *A Moth Grows in Brooklyn*. April 68:14
- Peterson, Rita W. and Lowery, Lawrence F. *Soil Gardening*. May 68:7
- Piltz, Albert. *The Federal Programs and the Elementary Science Teacher*. March 68:19
- Protheroe, Donald W. *Making Sound Visible*. April 68:19
- Pyron, Linda (Science and Teachers) May 68:6
- Quinn, Alvin. *"On the Spot" Science*. October 67:10; November 67:18; January/February 68:24; March 68:17
- Rainsbury, Ron. *Aviation*. October 67:21
- Reed, Elizabeth W. *Let's Clean Up the Language*. January/February 68:23
- Robinson, Anthony T. *Praying Mantes*. April 68:10
- Rosengren, John H. *Bone of Contention*. October 67:9

NOTE: Previously, the index in *Science and Children* has been published biennially. However, due to the increase in size of the journal, the index will appear annually in the May issue of *S&C*.

Ruchlis, Hy. *Radio Waves*. September 67:19, *Direction Finding by Radio*, October 67:19, *Liquid or Solid*. November 67:29, *Using Moon Photos to Develop Scientific Thinking*. December 67:16, *Judging the Duration of Time*. January/February 68:19, *Resolving Power of the Eyes*. March 68:16, *Multiple Images in Mirrors*. April 68:22, *The Medicine Dropper*. May 68:11

Russ, Laura Edwards (Science and Teachers) April 68:5

Salinger, Richard (Letters) May 68:2

Samples, Robert E. *Notes on Teaching Science*. March 68:28

Sauls, Charles and Shaw, Stan. *Observation Bee Hive*. March 68:17

Seager, Douglas B. *A Moon-Earth Model*. December 67:20; (Errata) January/February 68:13

Seeley, Millard G. *Changes in Matter* (Science Seminar) September 67:37

Shamos, Morris H. (Editorial) September 67:2

Shaw, Stan and Sauls, Charles. *Observation Bee Hive*. March 68:17

Simmons, Maitland (Science and Teachers) April 68:5

Simmons, Stanley (Science and Teachers) November 67:7

Smith, Clayton. *Our Lunar Timepiece*. December 67:13

Smith, Gary R. (Letters) December 67:5

Spitzer, Gerald and Hopman, Anne (Letters) May 68:3

Stanley, Edward. *Animal Secrets*, 1968. January/February 68:26

Steidle, Walter. *An Inquiry Into Safety*. March 68:13

Stout, Gerda H. *The Science of Matter*. November 67:16

Streng, Evelyn (Science and Teachers) September 67:8

Struthers, Joseph A., Gray, Joan E., and Gross, Helen E. *From Egg to Egg in Nine Weeks*. November 67:9

Subarsky, Zachariah (Science and Teachers) November 67:7

Swanson, A. Donald and Lundstrom, Donald F. *Bees in the Classroom*. April 68:15

Tredway, Dan. *Magnets, Millions, and Mixtures*. May 68:12

Tulloch, George S. *The Saw-Toothed Grain Beetle—and Thanatosis*. April 68:28

Turner, George C. *A Demonstration—Exploration Approach*. March 68:31

Tuttle, Frederick B. *NASA—An Elementary Teaching Resource*. December 67:11

Uczen, Martin. *Guidelines for an Elementary School Science Club*. January/February 68:14

Verizzo, Ouida and Woolever, John D. "Fiddling" with Fiddlers. September 67:12

Victor, Edward. *Controversial Aspects of the Elementary Science Curriculum Projects*. October 67:27

Vitale, Robert. *An Elementary Science Club*. January/February 68:17

Wagner, Gordon (Editorial) January/February 68:2

Walker, Ormiston. *Soft Landings on the Moon*. December 67:22

Watson, Fletcher G. (Letters) December 67:5

Webster, David (Letters) May 68:3

Williamson, Harold M. (Letters) October 67:4

Woolever, John D. and Verizzo, Ouida. "Fiddling" with Fiddlers. September 67:12

Wylie, Lydia (Science and Teachers) May 68:6

## SUBJECT INDEX

### Biology

*Among the Living*. James P. Ashley. November 67:34

*Are Ladybugs Helpful Insects?* Barry Stephen Persky. November 67:23

*Bees in the Classroom*. Donald F. Lundstrom and A. Donald Swanson. April 68:15

*Bone of Contention*. John H. Rosengren. October 67:9

*Closed System for Natural Selection*. A. Harold T. Neuberger. May 68:18

*Do You Use Your "Gall Power"?* Craig Chase. September 67:24

*Egg to Egg in Nine Weeks*. From. Joan E. Gray, Helen E. Gross, and Joseph A. Struthers. November 67:9

*Engineer a Railroad Track Expedition*. Clifford Knapp and Craig Chase. April 68:24

"Fiddling" with Fiddlers. John D. Woolever and Ouida Verizzo. September 67:12

*Insect Interest Transforms Neighborhood*. Lisa Pershouse and Brenda Lansdown. April 68:12

*Moth Grows in Brooklyn*. A. Barry Persky. April 68:14

*Observation Bee Hive*. Charles Sauls and Stan Shaw. April 68:17

*Photosynthesis and Respiration* (Science Seminar) Edwin B. Kurtz, Jr. October 67:39

*Praying Mantles*. Anthony Robinson. April 68:10

*Saw-Toothed Grain Beetle—and Thanatosis*. The. George S. Tulloch. April 68:28

*School Camping*. William H. Browning. October 67:14

*Shells in September*. Eileen Langford. September 67:11

*Soil Gardening*. Lawrence F. Lowery and Rita W. Peterson. May 68:7

*Studying Root Structure Through Hydroponics*. Anna Mayberry. September 67:27

*Wonders of Ponds and Streams*. Lilla M. Goodwin. September 67:16

### Chemistry

*Changes in Matter* (Science Seminar) Millard G. Seeley. September 67:37

*Demonstration—Exploration Approach*. A. George C. Turner. March 68:31

*Discovery Approach Applied*. The. John K. Gessel. November 68:33

*How Much Does Air Weigh?* Robert Gardner. May 68:14

*Liquid or Solid?* Hy Ruchlis. November 67:29

*Open-Ended Science Activities*. D. Craig Gillespie. April 68:27

*Science of Matter*. The. Gerda H. Stout. November 67:16

*Water Hardness*. Roger G. Iddings. April 68:7

### Earth Science

(Meteorology, Geology, Oceanography, Astronomy)

*Americans on the Moon*. Berenice G. Lambertson. December 67:10

*Astronomy for Grades 5-9*. December 67:32

"Hang Ten" . . . *Oceanography Field Research*. Mary Ann Church. May 68:21

*Lunar Games*. Jerrold William Maben and Rochelle Hartz Pennell. December 67:30

*Lunar Orbit*. The. Franklyn M. Branley. December 67:33

*Moon-Earth Model*. A. Douglas B. Seager. December 67:20; (Errata) January/February 68:13

*Mountains, Craters, and Seas on the Moon*. Francis J. Heyden. December 67:9

*Our Lunar Timepiece*. Clayton Smith. December 67:13

*Satellite Orbits*. R. Lynn Bondurant. December 67:19

*Soft Landings on the Moon*. Ormiston Walker. December 67:22

*Using Moon Photos To Develop Scientific Thinking*. Hy Ruchlis. December 67:16

*Vulcanism on the Moon*. Winifred Sawtell Cameron. December 67:26

*Weather Fronts*. Thomas L. Bogut. March 68:18

### NSTA Activities

*Call for Nominations for Distinguished Service Citations*. September 67:15

*Committee on International Activities Makes Plans for Future*. March 68:2

*CETS Announcement*. September 67:5

*Contributed Papers*. October 67:2

*Crowded Mailbags* (Editorial) November 67:4

*Dear Sir*. November 67:14

*Elections, 1968*. January/February 68:7

*Elementary Science Specialist Joins NSTA Staff*. September 67:5

*Freedom to Teach* (Editorial) September 67:2

*Gift Memberships*. January/February 68:7

*Gustav Ohaus-NSTA Awards for Science Teachers*. March 68:12

*Membership Dues to Increase*. September 67:5

*National Science Teachers Association, The* (Editorial). January/February 68:2

*NSTA Champions Science Teacher in Evolution Case*. September 67:3

*NSTA Convention*. October 67:38; November 67:24; December 67:4; January/February 68:32; March 68:27; May 68:16

*NSTA Program at NEA Convention*. April 68:9

*NSTA Programs at AAAS Meeting*. November 67:2

*NSTA Regional Conferences*. September 67:34

*NSTA State Membership Directors*. January/February 68:3

*New FSA Director at NSTA (Ford Contest)*. October 67:2

*New NSTA Officers Announced*. April 68:2

*New Publications*. December 67:2; January/February 68:7; April 68:2

*New S&C Advisory Board Members*. September 67:6

*New Technical Consultant Appointed*. November 67:2

*Saturday Science Seminars*. December 67:7; March 68:25

S&C Advisory Board Meets. March 68:2  
 Science Certificates. November 67:2  
 Science Message to Parents. October 67:22  
 Science Teaching Achievement to be Recognized. September 67:5  
 Summer Opportunities Listing. March 68:30  
 Sun Oil Sponsors Science Seminars. February 68:7  
 TST Wins Ed Press Award. December 67:2

### Physics

Air Pressure — A Different Approach. John R. Cavanaugh. October 67:30  
 Aviation. Ron Rainsbury. October 67:21  
 Direction Finding by Radio. Hy Ruchlis. October 67:19  
 Judging the Duration of Time. Hy Ruchlis. January/February 68:19  
 Lever, The. Robert P. Balin. September 67:26  
 Magnetism and Electricity. James E. Casey and George F. McCahey. October 67:16  
 Making Sound Visible. Donald W. Protheroe. April 68:19  
 Medicine Dropper, The. Hy Ruchlis. May 68:11  
 Multiple Images in Mirrors. Hy Ruchlis. April 68:22  
 Radio Waves. Hy Ruchlis. September 67:19  
 Resolving Power of the Eyes. Hy Ruchlis. March 68:16

### Programs, Facilities, and Resources

ACEI Summer Study. March 68:33

Animal Secrets, 1968. Edward Stanley. January/February 68:26  
 Astronomy for Grades 5-9. December 67:32  
 CCSS Program of the National Science Foundation, The. March 68:24  
 Cornell Science Leaflet. December 67:21  
 Elementary Science Club, An. Robert Vitale. January/February 68:17  
 EPIE Looks at Elementary School Science Materials. September 67:15  
 Federal Programs and the Elementary Science Teacher, The. Albert Piltz. March 68:19  
 Guidelines for an Elementary School Science Club. Martin Uzen. January/February 68:14  
 NASA — An Elementary Teaching Resource. Frederick B. Tuttle. December 67:11  
 NSF Grants for Elementary Science. September 67:28  
 National Elementary Science Curriculum Projects. March 68:22  
 "On the Spot" Science. Alvin W. Quinn. October 67:10; November 67:18; January/February 68:24; March 68:17; April 68:18  
 School Administrator Considers the Adoption of a New Program, A. Calvin M. Frazier. March 68:9  
 Television on a Shoestring. A. C. Brewer. October 67:11  
 World Opens for Head Start Children, The. Helen P. Bradley. November 67:31

### Science Education

Bibliography of Teacher Resource Texts for Elementary Science. May 68:27  
 Boundaries of Elementary School Science. Frederica Friedman. April 68:31

Can You Follow Directions? Pearl Astrid Nelson and Roberta Patton. April 68:26  
 Controversial Aspects of the Elementary Science Curriculum Projects. Edward Victor. October 67:27  
 Discovery Approach Applied, The. John K. Gessel. November 67:33  
 Experiment in Discovery, An. Arthur L. Costa. January/February. 68:Cover II  
 Federal Programs and the Elementary Science Teacher, The. Albert Piltz. March 68:19  
 Formulating Objectives for Elementary Science (Part I), Evaluation of Elementary School Science. Ronald D. Anderson. September 67:20  
 Has the Objective Been Attained? (Part II), Evaluation in Elementary School Science. Ronald D. Anderson. October 67:33  
 Inquiry Into Safety, An. Walter Steidle. March 68:13  
 Let's Clean up the Language. Elizabeth W. Reed. January/February 68:23  
 Magnets, Millions, and Mixtures. Dan Tredway. May 68:12  
 Notes on Teaching Science. Robert E. Samples. March 68:28  
 Operative Content of Science and Values, The. Lazer Goldberg. January/February 68:11  
 Recognition and Significance of Children As Innovators, The. Katherine E. Hill. September 67:29  
 Safety in Science. March 68:14  
 School Administrator Considers the Adoption of a New Program, A. Calvin M. Frazier. March 68:9  
 Science: The World Opens for Head Start Children. Helen P. Bradley. November 67:31

## Bibliography of Teacher Resource Texts For Elementary Science

THERE are available a number of teacher textbooks and sourcebooks on the methods and theory of teaching science at the elementary school level. A selection of these texts is listed here for reference. For additional publications and a list of student texts see the NSTA *Bibliography of Science Courses of Study and Textbooks, Grades K-9*. Individuals interested in any of the publications listed should write directly to the publisher for further information.

Blough, Glenn and Schwartz, Julius. *Elementary School Science and How to Teach It*. Holt, Rinehart and Winston, Inc., 383 Madison

Avenue, New York City 10017. 1964. \$9.95.

Carin, A. and Sund, R. *Teaching Science Through Discovery*. Charles E. Merrill Books, Inc., 1300 Alum Creek Drive, Columbus, Ohio 43216. 1964. \$8.75.

Craig, Gerald Spellman. *Science for the Elementary School Teacher*. Blaisdell Publishing Company (Ginn), 275 Wyman Street, Waltham, Massachusetts 02154. 1966. \$10.50.

Erickson, J. W. *The Earth in Space: A Source Book for Elementary School Teachers*. Teachers College Press, Teachers College, Columbia University, 525 West 120th Street, New York City 10027. 1965. \$3.50 (paper); \$5.75 (cloth).

Gega, P. C. *Science in Elementary Education*. John Wiley and Sons, Inc., 605 Third Avenue, New York 10016. 1966. \$8.95.

Jacobson, W. J. and Tannenbaum, H. E. *Modern Elementary School Science*. Teachers College Press, Teachers College, Columbia University, 525 West 120th Street, New York City 10027. 1961. \$2.25 (paper).

Heller, Robert L. (Editor), American Geological Institute. *Geology and Earth Sciences Source Book*. Holt, Rinehart and Winston, 383 Madison Avenue, New York City 10017. 1962. \$2.96 (paper).

Hone, Joseph and Victor, E. *Teaching Elementary Science: A Sourcebook for Elementary Science*. Harcourt, Brace and World, Inc., 757 Third Avenue, New York City 10017. 1962. \$8.50.

Kambly, P. E. and Suttle, J. E. *Teaching Elementary School Science*. Ronald Press Company, 15 East 26th Street, New York City 10010. 1963. \$7.00.